BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

Washington, D. C. 20554

In the Matter of	§	
	§	
Replacement of Part 90 by	§	PR Docket No. 92-235
Part 88 to Revise the Private Land	§	
Mobile Radio Services and Modify	§	
the Policies Governing Them	§	

TO: The Commission

COMMENTS OF MITCHELL ENERGY & DEVELOPMENT CORP.

Mitchell Energy & Development Corp. (Mitchell) and its subsidiaries conduct oil and gas exploration and production, and natural gas transportation and processing primarily in the State of Texas. Mitchell owns and operates conventional land mobile radio systems comprised of approximately 600 land mobile radios, repeaters, base stations, and other equipment licensed to operate on high band frequencies in the Petroleum Radio Service. These two-way radio systems serve to minimize the hazards which are necessarily involved in oil and gas operations. As such, we are vitally interested in the referenced proposed rule. Through these comments, Mitchell will show: (1) the manner in which our current radio systems meet the safety needs of our operations; (2) our support of the consensus plan of the Land Mobile Communications Commission; (3) our support of the Federal Communications Commission's (FCC) exclusive use overlay provisions; and (4) how our remote operations necessitate wide area coverage by land mobile radios.

I. MITCHELL'S LAND MOBILE RADIO SYSTEMS MEET THE SAFETY NEEDS OF REMOTE LOCATIONS

Mitchell is concerned that the proposed rule refarming the spectrum will force the premature replacement of Mitchell's entire mobile radio systems. Mitchell uses its land mobile radio systems strictly for private communication within the company. Most of Mitchell's oil and gas operations are geographically remote and unmanned. These isolated locations are not reachable by nor connected to any conventional system of communication. Mitchell field personnel who inspect these unmanned facilities are able to use the two-way radios to dispatch crews to perform repairs or call for assistance.

The U. S. Department of Transportation (DOT) imposes communication requirements in its pipeline safety regulations at 49 C.F.R. §§192, 193 and 195 for natural gas, liquefied gas, and hazardous liquid pipelines. DOT's natural gas pipeline safety regulations at 49 C.F.R. §192.171(c), read, *"[E]ach compressor unit in a compressor station must have a shutdown or alarm device that operates in the event of inadequate cooling or lubrication of the unit."* In compliance with that regulation, Mitchell has installed alarms on all of its compressor stations (over 100 units) which automatically transmit via mobile radio spectrum the information necessary to ensure safe operation of its compressors. The radio frequencies are also used by Mitchell field personnel to communicate information gathered as the result of monitoring hundreds of miles of pipelines in remote locations, as well as providing a way to call for assistance in remote and isolated worksites. The radios are necessary to ensure the maximum

degree of safety and control for those personnel and facilities, and the land mobile radio systems have been designed to serve the needs of Mitchell's specific operations.

The move to narrowband technology beginning January 1, 1996, as contained in the proposed rule, would force Mitchell to replace its analog radio equipment with digital equipment before the equipment would otherwise be replaced. While many transmitters can be adjusted to operate on narrower bands, receivers can seldom be adjusted downward to pick up narrow frequencies with any clarity. Engineers who service Mitchell's two-way radios have stated flatly that as a practical matter, the way to adjust analog two-way radios to narrowband technology is to throw them away and purchase new radios. This view has been echoed by Motorola, maker of most of Mitchell's two-way radios. Motorola developed a retrofit kit to convert analog radios to narrowband, but is no longer producing this kit. The cost to Mitchell to replace its current mobile radio equipment with new narrowband radio equipment is estimated to be approximately $950,000. By 1996, the cost will easily surpass $1,000,000. In light of such a substantial capital outlay, Mitchell requests that the Commission extend the date for compliance to allow more time to phase out existing analog equipment and replace it with digital equipment. Since Mitchell's radio equipment serves its needs extremely well, it would be a waste of resources to have to discard the equipment prematurely.

The transition to narrowband could pose an additional problem for some of Mitchell's operations using radio frequencies to transmit data. Some two-way radios in North Texas are set up to communicate data from compressor sites to a fixed location on a regular schedule. The

flow of data lasts for about 30 seconds, and is interruptible by voice communication. In the event voice communication interrupts, the flow of data resumes when talking ends. Because data transmission requires wide frequency bands, Mitchell is concerned that the transition to narrowband technology will prohibit transmission of data by radio frequency.

II. MITCHELL SUPPORTS THE CONSENSUS PLAN OF THE LAND MOBILE COMMUNICATIONS COMMISSION

The consensus plan of the Land Mobile Communications Commission (LMCC) acknowledges the desirability and wisdom of improving spectrum efficiency in order to obtain the greatest use of the radio frequencies on which we operate. Mitchell supports the LMCC's consensus plan, specifically Option A for frequencies in the 150-174 MHz band. Option A would have licensees convert to 12.5 KHz spacing by January 1, 2004, with the option to voluntarily replace equipment before that time. In this manner, Mitchell and other companies could gradually replace equipment without incurring a significant expense in any one budget year. Adoption of Option A of the LMCC consensus plan for the 150-174 MHz frequencies would provide an orderly and gradual transition to narrowband technology, allowing users such as Mitchell to change out systems over time without losing any of the capability which it now enjoys.

III. MITCHELL SUPPORTS THE FCC'S EXCLUSIVE USE OVERLAY PROVISIONS

The exclusive use overlay provisions in the proposed rule are a positive step, and we look forward to working with the FCC in obtaining several exclusive use overlay channels. Two of Mitchell's channels in the North Texas area have loads of over 100 mobiles per channel which we feel confident will qualify for exclusive use overlay. However, Mitchell has another channel in the area which is not fully loaded--with perhaps less than 20 mobile radios--but which is extremely important from a safety perspective. Mitchell has been approached by a large user who is interested in exclusive use of that channel, and we are concerned that since the channel is not fully loaded, we may lose the channel altogether. It is imperative for the safety of its employees and the safety of the general public that Mitchell's land mobile radios continue to give the reliable communication service that they do at the present time. Therefore, Mitchell requests that the channel loading requirements be waived for applicants demonstrating a need to operate based on safety considerations.

IV. MITCHELL'S REMOTE LOCATIONS NECESSITATE WIDE AREA COVERAGE

Of concern in the technical changes section of proposed rule is the reduction of effective radiated power of mobile radios through lowering of antenna height above average terrain. The proposed rule cites a high-powered signal being used to cover a 3-mile radius city as an example of one place where high power output is unnecessary. Mitchell's operations in North Texas cover 13 counties, a radius of hundreds of miles. Lowering effective radiated power would

simply force us to put base stations on more towers in order to cover the same radius as is now covered. The land mobile radios Mitchell employs must reach up and down hundreds of miles of pipelines, and to far-flung drilling locations. We see no gain or benefit in the installation of more base stations on more towers to cover the same radius.

Thank you for your consideration of our comments. If you have any questions or need further information, please feel free to contact me at (713) 377-6005, or Ginger Bulcroft at (713) 377-6515.

Respectfully submitted,

MITCHELL ENERGY & DEVELOPMENT CORP.

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